

TWO NEW CAVE SPIDERS OF GENERA *CYBAEUS* AND *LEPTONETA* FROM SHIKOKU ISLAND

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Cybaeus kiuchii n. sp.

(Japanese name Kiuchi-namihagumo)

Loc. and Date : - Zenjō cave, Tokushima Prefecture, Nov. 23rd, 1961, 1 adult male

Collector : - Morisato KIUCHI

Measurements in millimetres : - Total length 4.5 ; cephalothorax 2.3, width 1.7 ; abdomen 2.2, width 1.6

Segments Appendages	Total	Femur	Patella	Tibia	Metatarsus	Tarsus
1st leg	9.82	2.74	0.92	2.44	2.35	1.64
2nd leg	9.04	2.08	0.94	2.24	2.24	1.56
3rd leg	8.44	2.24	0.76	1.80	2.24	1.40
4th leg	10.40	2.64	0.72	2.44	2.96	1.64
Palp	3.38	1.03	0.40	0.60		1.08

Measurements in ratio

Major diameter of the direct eye	3.0
" the 1st indirect eye	6.0
" the 2nd indirect eye	6.0
" the 3rd indirect eye	5.0
Interval of the direct eyes to each other	1.5
" the direct eye and the 1st indirect eye	1.8
" the direct eye and the 3rd indirect eye	3.5
" the 1st and the 3rd indirect eye	3.0
" the 2nd the 3rd indirect eye	3.5
" the 3rd eyes to each other	5.0
Width of the ocular area	29.0
Length of the ocular area	12.0
" the clypeus	9.0

Color (in alcohol) : - Cephalothorax yellowish brown. Chelicerae, maxillae, labium and legs brown. Sternum yellowish brown. Hairs grey and spines black. Abdomen very pale grey in ground color with a faintly indicated longi-

tudinal stripe on the anterior one-third and several indistinct chevrons on the posterior part.

Cephalothorax longer than broad. Cephalic part narrow and both sides rather parallel. Cephalic suture, radiating grooves and longitudinal median fovea are evident. From ocular area to the median fovea, there are hairs arranged in 3 lines. Chelicerae strong, superior margin of the fang furrow armed with 2 teeth. Inferior margin with 7 teeth, basal 4 are very small. Basal part of the chelicerae with long straight hairs. Maxillae slightly inclined inwards. Labium as long as wide. Anterior margin procurved. Sternum rather longer than broad, 32 : 30 in ratio. Anterior margin straight and its hind part is prolonged into the 4th coxae. 4th coxae separated by $\frac{3}{5}$ their length.

Eyes: Anterior row recurved, posterior row procurved (straight as seen from above). (Row of indirect eyes incurved.) Direct eye is the smallest, about half of the 1st indirect eye. Direct eyes separated by about one radius and by more than one radius from the 1st indirect eyes. The 3rd indirect eyes separated by one diameter and from the 2nd less than one diameter. Clypeus equals 2 diameters of the 1st indirect eye. Legs: Order of length 4123. Tibia I with 4 pairs of ventral spines, 4 prolateral, 3 retrolateral and 2 dorsal spines. Metatarsus I with 3 pairs of ventral spines, 2 prolateral, 2 retrolateral and 3 dorsal spines. Tibia II with 3 proventral, 4 retroventral, 4 prolateral and 3 retrolateral spines. 2 dorsal spines degenerated into weak bristles. Metatarsus II with 3 pairs of ventral spines, 3 prolateral, 3 retrolateral and 3 dorsal spines. The paired claws of I, II, have 8 teeth, and III, IV have 6 teeth. The median claw has 2 teeth.

Palp: Tibia with a leaf-like apophysis and a bluntly pointed apophysis on the distal end. An apophysis is present in the distal half of the patella. Its apical edge with 3 black teeth. Patella shorter than the tibia. Patella with 2 dorsal spines. Tibia with one dorsal spine, and 4 pairs of dorsal trichobothria, and many ventral bristles.

Abdomen oval in shape. Spinnerets: Anteriors stout and conical, rather contiguous. Apical segments shorter than the basals. Posteriors shorter than the anteriors and apical segments not clearly recognizable.

This species resembles *Cybaeus kirigamineensis*. It differs from that species in the following characters;

<i>C. kiuchii</i> ♂	<i>C. kirigamineensis</i> ♂
Tibia I with 4 pairs of ventral spines. Direct eyes separated by one radius.	Tibia I with ventral spines 2-2-2-1. Direct eyes separated by about one diameter.
3rd indirect eyes separated by about one diameter and from 2nd by less than one diameter of the 3rd.	3rd indirect eyes separated by more than one diameter and from 2nd by more than one diameter of 3rd.
Palp: Apophysis of patella with 3 teeth. Anterior margin of the fang furrow with only 2 teeth.	Palp: Apophysis of patella with 2 teeth. Anterior margin of the fang furrow with 3 teeth.

***Leptoneta zenjoensis* n. sp.**

(Japanese name Zenjō-mashiragumo)

Loc. and Date : - Zenjō cave, Tokushima Prefecture. Oct. 23rd 1961, 1 adult male

Collector : - Morisato KIUCHI

Measurements in millimetres : - Total length 1.56 ; cephalothorax 0.75, width 0.70 ; abdomen 0.60, width 0.70.

Segments Appendages	Total	Femur	Patella	Tibia	Metatarsus	Tarsus
1st leg	6.05	1.60	0.30	1.80	1.35	1.00
2nd leg	4.62	1.24	0.26	1.32	1.00	0.80
3rd leg	3.88	1.08	0.24	1.00	0.84	0.72
4th leg	5.05	1.28	0.24	1.53	1.20	0.80
Palp	1.12	0.44	0.16	0.20		0.32

Measurements in ratio

Major diameter of the 1st eye	14.0
" the 2nd eye	12.0
" the 3rd eye	10.0
Interval of the 2nd eyes to each other	15.0
" the 1st and the 3rd eye	14.0
" the 2nd and the 3rd eye	5.0
Width of the ocular area	30.0
Length of the ocular area	32.0
" the clypeus	about 28.0

Color (in alcohol) : - Cephalothorax yellowish brown. Chelicerae, legs brown. Sternum and labium brownish yellow. Abdomen pale yellow. Hairs and spines black,

Cephalothorax slightly longer than wide. Cephalic part narrowing in front. Median fovea, cephalic suture evident, but radiating grooves faint.

1st eye is the largest. 3rd eye is oval in shape. Vertical axes of 3rd eyes run parallel. 3rd eye separated by about one radius from the 2nd eye. Interval of the 1st and the 3rd eye is about one diameter of the 1st (one and half diameter of the 3rd). Interval of the 2nd eyes to each other is more than the diameter of the 2nd. Clypeus shorter than the length of the ocular area.

Maxillae normal shape, longer than wide. Labium rather wider than long, semielliptical. Sternum slightly longer than wide, bluntly produced backwards. Legs: order of length 1423. Palp: tip of the tibia with one projection. 2nd joint of the projection is more than 4 times as long as 1st joint, and the tip sharply curved.

This species resembles *Leptoneta melanocomata*. It differs from that species in following characters;

<i>L. zenjoensis</i>	<i>L. melanocomata</i>
Total length 2.2mm	Total length 1.56mm.
Vertical axes of the 3rd eyes run parallel.	Vertical axes of the 3rd eyes intersect backwards to each other.
Interval of the 2nd eyes to each other is more than the diameter of them.	Interval of the 2nd eyes to each other is less than their diameters
Palp: 2nd joint of the projection of the tibia is more than 4 times as long as 1st joint and tip is sharply curved.	Palp: 2nd joint of the projection of the tibia is one and half times as long as 1st joint and bluntly curved.

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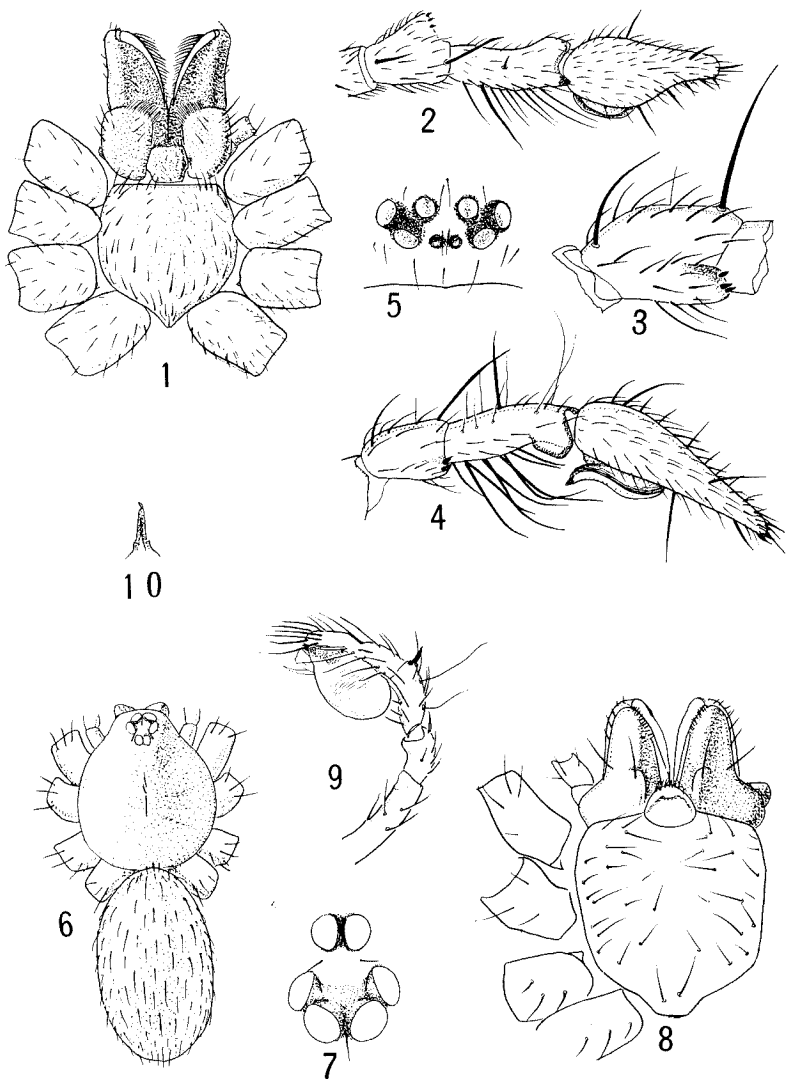
Explanation of Plate

1-5 *Cybaeus kiuchii* n. sp. male

1. Maxillae, labium, sternum.
2. Dorsal aspect of palp.
3. Lateral aspect of patella of palp.
4. Lateral aspect of palp.
5. Eyes.

6-10 *Leptoneta zenjoensis* n. sp. male

6. Dorsal aspect.
7. Eyes.
8. Maxillae, labium, sternum.
9. Lateral aspect of palp.
10. Projection of tibia of palp.



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